

## ABSTRACT

A pipelined Universal Serial Bus (USB) parallel frame delineator and non-return to zero invert (NRZI) decoder is described. Using a three-stage pipeline and parallel data stream processing, a USB transceiver delineates received asynchronous frame boundaries within a USB peripheral NRZI data stream. Using asynchronous parallel data stream processing the USB transceiver concurrently decodes received NRZI encoded data.

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